

The invention claimed is:

1. In a wireless communications network that supports Broadcast-Multicast (BCMC) Services (BCMCS), a method comprising the steps of:  
transmitting at least one differential BCMC Services Parameters  
5 Messages (BSPM) containing updated information for one or more existing BCMC flows and/or information for one or more new BCMC flows; and/or  
transmitting a sequence of plural partial BSPMs, each partial BSPM containing information for one or more different BCMC flows, the sequence of plural partial BSPMs together containing information for all existing BCMC  
10 flows.
2. The method of claim 1 wherein a differential or a partial BSPM is used to page one or more mobile terminals at the start of a BCMC flow or to end a BCMC flow.
3. The method of claim 1 wherein a differential or partial BSPM is  
15 used in place of a group page or to provide supplementary information to a group page.
4. The method of claim 1 wherein each BSPM includes an indication of whether it is a differential BSPM or a partial BSPM.
5. The method of claim 1 further comprising the step of:  
20 transmitting a full BSPM containing information for all existing BCMC flows, a full BSPM being transmitted less frequently than differential or partial BSPMs are transmitted.

6. The method of claim 5 wherein each BSPM includes an indication of whether it is a full BSPM, a differential BSPM, or a partial BSPM.

7. The method of claim 1 wherein a partial BSPM in the sequence of partial BSPMs includes an indication that it is the first partial BSPM in the  
5 sequence of partial BSPMs, and/or an indication that it is the last partial BSPM in the sequence of partial BSPMs.

8. The method of claim 1 wherein each partial BSPM includes an indication of its position in the sequence of partial BSPMs.

9. The method of claim 1 wherein each differential BSPM and partial  
10 BSPM includes a sequence number that is unique to the type of BSPM.

10. The method of claim 5 wherein each full BSPM, differential BSPM and partial BSPM includes a sequence number that is unique to the type of BSPM.

11. The method of claim 1 wherein the BSPM includes history  
15 information for previously transmitted BSPMs.

12. The method of claim 11 wherein the history information contains sequence number for previously transmitted BSPMs, and/or information for the flows that were included in those previously transmitted BSPMs.

13. In a wireless communications network that supports Broadcast-  
20 Multicast (BCMC) Services (BCMCS), a method comprising the steps of:

receiving a BCMC Services Parameters Messages (BSPM) together with an indication that the BSPM is: (1) a full BSPM that contains information for all existing flows: (2) a differential BSPM that contains updated information

for one or more existing BCMC flows and/or information for one or more new BCMC flows; or (3) a partial BSPM that is one in a sequence of plural partial BSPMs that each contain information for one or more different BCMC flows and wherein the sequence of plural partial BSPMs together contains

5 information for all existing BCMC flows.

14. The method of claim 13 further comprising the steps of:

if the received BSPM is a full BSPM, deleting stored BCMC flow information and replacing it with the flow information contained in the full BSPM;

10 if the received BSPM is a differential BSPM, replacing stored flow information with updated flow information contained in the differential BSPM or adding and storing information for a new flow contained in the received differential BSPM; and

if the received BSPM is a partial BSPM, replacing stored flow  
15 information with updated flow information contained in the partial BSPM.

15. The method of claim 14 further comprising the steps of:

if the received BSPM is a partial BSPM, determining whether it is the last in the sequence of partial BSPMs, and

if it is the last in the sequence of partial BSPMs, deleting stored  
20 information for flows that have not been updated or added in the sequence of BSPMs.

16. The method of claim 14 wherein the received BSPM also contains a sequence number that is unique to the type of received BSPM, the method

further comprising the step of determining from the sequence number in the received BSPM whether a previous BSPM has not been received.

17. The method of claim 16 wherein if it is determined that a previous BSPM has not been received, deleting stored information for all flows.

5        18. The method of claim 16 wherein if it is determined that a previous BSPM has not been received, continuing to use the information for flows contained in the received BSPM and previously stored information.

19. The method of claim 16 wherein if it is determined that a previous BSPM has not been received, using history information contained in received  
10    BSPMs to update flow information.

20. In a wireless communications network; a method comprising:  
transmitting a differential overhead message containing updated  
parameters for services provided by the network and/or parameters for new  
services being provided by the network; and/or

15        transmitting a sequence of partial overhead messages, each partial overhead message containing parameters for one or more different services being provided by the network, the sequence of partial overhead messages together containing parameters for all the services provided by the network.

21. The method of claim 20 transmitting a full overhead message  
20    containing parameters for all the services provided by the network, a full overhead message being transmitted less frequently than differential or partial overhead messages are transmitted.

22. The method of claim 21 wherein each overhead message includes an indication of whether it is a full overhead message, a differential overhead message, or a partial overhead message.

23. In a wireless communications network, a method comprising the  
5 steps of:

receiving an overhead message together with an indication that the overhead message is: (1) a full overhead message that contains parameters information for all services being provided by the network: (2) a differential overhead message that contains updated parameters for one or more existing  
10 services being provided by the network and/or parameters for one or more new services being provided by the network; or (3) a partial overhead message that is one in a sequence of plural partial overhead messages that each contain parameters for one or more different services being provided by the network and wherein the sequence of plural partial overhead messages  
15 together contains parameters for all existing services being provided.

24. The method of claim 23 further comprising the steps of:

if the received overhead message is a full overhead message, deleting stored parameters for each service being provided by the network and replacing then with the parameters contained in the full overhead message;  
20 if the received overhead message is a differential overhead message, replacing stored parameters with updated parameters contained in the differential overhead message or adding and storing parameters for a new service contained in the received differential overhead message; and

if the received overhead message is a partial overhead message,  
replacing stored parameters with updated parameters contained in the partial  
overhead message.